Crossways in Cultural Narratives
ERASMUS MUNDUS MASTERS

Ecophenomenology and Technology as Pharmakon: Repairing Our Relationship to the World According to Abram and Stiegler

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Declaration

I, Nicholas DALY, hereby certify that this dissertation, which is 20,625 words in length, has been written by me, that it is a record of work carried out by me, and that it has not been submitted in any previous application for a higher degree. All sentences or passages quoted in this dissertation from other people's work (with or without trivial changes) have been placed within quotation marks, and specifically acknowledged by reference to author, work and page. I understand that plagiarism – the unacknowledged use of such passages – will be considered grounds for failure in this dissertation and, if serious, in the degree program as a whole.

To the cosmic game of hide and seek...

Abstract

This dissertation reads the works of two contemporary philosophers together in order to build new and synthetic conversations about nature, technology, artistic expression, and consciousness. The first philosopher, David Abram, is a pioneer of 'ecophenomenology', which brings the phenomenological writings of Martin Heidegger and Maurice Merleau-Ponty into dialogue with contemporary ecological concepts and environmental philosophy. Abram argues that humans have a fundamental psychological need for sensuous, bodily, and reciprocal encounters with the natural world (what he terms the 'more-than-human' world).

The second philosopher is Bernard Stiegler, known as a famous philosopher of technology and former student of Jacques Derrida. Using a very broad definition of technology, Stiegler came to notoriety for defining humans as 'always, already technological', arguing that our consciousness has always been shaped by technology. His later work explores how new technologies limit human spirit while simultaneously creating unprecedented opportunities for self-expression, artistic expression, and political realities.

By reading these philosophers together, the dissertation argues that despite differences in academic discipline, genre, language, and cultural context, these thinkers address the same basic issues about human consciousness which opens possibilities for environmentalists, artists, and technologists to address global climate chaos, industrial populism, and disruptive technological innovation. By turning the authors' concepts back unto philosophy itself, the thesis also speaks to the ecological and pharmacological dynamics of philosophical encounter.

Keywords: Abram, Stiegler, ecophenomenology, technology, individuation

Contents

Introduction:

The Chance for Coherence

The great trend in the human experience could be summarized as a move towards technology and away from ecology. This has taken on especial concern recently as the impact of our technology on our global environment is inescapable. This poses something of a paradox: the turning-towards technology and the turning-away from ecology seems in some ways the natural course of human (or even transhuman) development, yet it seems to put us at existential risk in the long-term while contributing to our general malaise in the present. The relatively recent invention of the Internet brought to new registers our ability to communicate and access knowledge. At the same time, there is a sense that our social and psychological lives are struggling to stay afloat in a sea of information which pulls us in all directions and climate scientists have confirmed suspicions that the earth is ill after centuries of human exploitation. Grand narratives of world-wide technological disruption and climate disaster are the alarm bells that ring today, and underneath these sirens runs a deep drone of cultural and psychic disenchantment.

Among this noise, however, there are voices encouraging us to reassert our titles as clever and oddly adaptable creatures. We are playful tool-makers, cooperative actors, and wielders of that most powerful faculty, language. Inside every *homo sapien* is *homo faber*, *homo luden*, and *homo grammaticus*. To reconcile our paradoxical situation, we must look at that which is present in both technological and ecological confusion- human beings. By examining the works of French philosopher of technology, Bernard Stiegler (whose view of human beings is that we have always been formed by and engaged with technics) and American environmental philosopher and cultural ecologist David Abram (whose view is that we are inescapably ecological) in context with one another, we can develop an understanding of human beings as techno-ecological in nature. Through this nuanced understanding, we can not only begin to develop more effective ways to engage with the interplay of technology and ecology in education, art, and politics; we can also recognize philosophy as an important technic itself as well as an environment.

Surprisingly, Stiegler and Abram's reenchantment philosophies are nowhere mentioned in the same literature. This thesis will show that, in part, this is due to the geo-cultural divisions between the two philosophers and will argue for the greater interaction of Continental and

American philosophies. Additionally, the aesthetic differences in Stiegler and Abram's work make the direct comparison of the two challenging. Nonetheless, the importance of a hybrid approach as a mechanism for greater understanding of the human experience is clear. Thus, this thesis asks two central questions. Firstly, How can synthesizing Abram's reciprocal and bodily environmentalism with Stiegler's concepts of originary technicity, general organology, and pharmakon help us build philosophy which embraces ecology while being better-equipped to deal with technics? and secondly, How can we critically understand the writings of Abram and Stiegler from pharmacological and ecophenomenological perspectives in order to understand philosophy as a 'technics of repair', thus deconstructing 20th century Western philosophy via the question of technics?

Underlying these questions is a hypothesis that a synthesis of their works provides a contribution to the ecophenomenological tradition that can help artists, educators, and philosophers to understand the limits and possibility inherent in technology and to broaden their definition of environment. The hope here is that teasing out a common method in Abram and Stiegler's work will offer readers a strategy for overcoming false and blinding conceptual hierarchies. This thesis is concerned with a specific few of those binaries: nature and technology, theory and practice, expression and calculation, mind and matter. Developing a 'technics of repair' permits the thesis call for new roles for Western philosophy and new metaphors for the philosopher.

The comparative analysis and attempted synthesis is justified by the basic structural similarities in the critiques of the two philosophers and simultaneous variance of their cultural, linguistic, and disciplinary contexts. That the philosophers are geo-culturally disparate contemporaries who approach similar problems to similar ends encourages an analysis of the dynamics of communication and place in contemporary philosophy. A synthesis of their concepts and philosophical styles serves as more than an ecological or technological metaphor however. It represents an attempt to overcome distance and difference on multiple levels. And so how to proceed?

The work begins with a survey of literature on ecocriticism and phenomenology which serve as an academic locus of encounter between environmental philosophy and philosophy of technology. The purpose here is to point out the cultural, linguistic, and historical dynamics which shape the academic fields and the knowledge they produce. This sets an initial framework for

understanding the need for increased dialogue across continents, languages, and academic disciplines in order to create consilience in the knowledge we create.

Next, there is a chapter presenting the works of each of the philosophers. This section emphasized how the philosophers extend the thinking of their predecessors to generate parallel critiques of modern society based in a critical genealogy of technics. This opens up to a second chapter exploring how a synthesis of their works constitutes a 'technics of repair' for both disenchanted readers and for philosophic writing. It turns their concepts back onto the phenomenon of contemporary philosophy itself in order to explore its ecological and pharmacological dynamics. It ultimately argues for epistemic humility in philosophy. It proceeds in two parts. The first section argues that the underlying shared method of Abram and Stiegler's philosophies of re-enchantment equates technological competence with an understanding of its origins. The second half brings together Abram's ecological concepts and notions of reciprocity with Stiegler's originary technicity and general organology to evaluate philosophy as a phenomenon we encounter and participate in which has an organological and pharmacological dynamic.

This thesis is limited in scope to an analysis of the first of Abram and Stiegler's books. It necessarily touches upon the work of their influences but simply cannot account for the hundreds of books, articles, public lectures, online essays, and video discussions that both men have generated. By focusing only on their foundational texts, the thesis attempts to remain calm and resist the very problems being addressed by the philosophers: technological disorientation by way of information overload and disconnect from the world by way of using the written word too much as mirror and not enough as window. Let us not get stuck in the chamber of self-reflection

The overarching claim of this thesis is that way to overcome the limitations of these philosopher's works is through an application of their core concepts to the object of philosophy itself. That is to say, that understanding philosophy as a phenomenon we encounter as both pharmacological and ecological in nature is a crucial step to creating philosophy in the 21st century which embraces both technological and ecological issues with appropriate conceptual equipment and skill. This project is a way of advocating for compassion and self-sameness as methods in philosophy motivated by two beliefs: the impact of philosophy on society is reciprocal and recursive, and the co-constitutive and relational nature of phenomena means that the best way to overcome malaise is through deconstruction of the privileging of the self over the other, which results in transformation for all parties. If the thesis is successful, it will have hinted at a

pharmacological and ecophenomenological approach to 21st-century philosophy that does poetic justice and honor to the works of the men at hand and to their predecessors.

Chapter One:

Environmental Thought and Technology: The Gateless Gate

In 2014, Oxford University Press published *The Oxford Handbook of Ecocriticism* as a response to exponential growth in academic work at the intersection of literary theory, continental philosophy, and urgent global environmental crisis. Ecocriticism as a field 'emerged as a movement among literary scholars in the early 1990s, born of an awareness of environmental crisis and a desire to be part of the solution.'[1] As per the handbook, the past 25 years or so have seen a near exponential growth of publications in the field and increased engagement with literary theory and continental philosophy.[2] The work of European philosophers 'help ecocritics to theorize connections between literature, the environment, and, for example, the nature of language, textuality, perception of space, construction of difference, species boundaries, social class, power, risk, ideology, agency, human psychology, epistemology, and ontology.'[3] Not mentioned explicitly above, is the relationship of any of these inquiries to the question of technology. This does not mean that technology is not addressed by ecocritics. It seems, however, to support a central claim of French philosopher Bernard Stiegler: that the question of technology has been and continues to be suppressed in philosophy. Insofar as Stiegler's work explores the perceptual implications of technology, it is relevant to ecologically-minded humanities work through what it can contribute to one of its foundational philosophical arms: the field of ecophenomenology.

In order to understand how the question of technics is essential to ecophenomenology- a central goal of this thesis- it is necessary to understand the history of the discipline in terms of its central thinkers and major themes and how phenomenology has formed the philosophical basis for the distinct disciplines of environmental philosophy and philosophy of technology. Phenomenology was originally developed a series of conceptual tools for understanding consciousness and challenging the epistemological foundations of naturalistic science. As a historical philosophical movement, it is associated with such thinkers as Edmund Husserl, Martin Heidegger, Maurice Merleau-Ponty and existentialist Jean-Paul Sartre. During the 20th century, it

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[1] *The Oxford Handbook of Ecocriticism*, ed. by Greg Garrard (Oxford, New York: Oxford University Press, 2014), p. ix.
[2] Ibid, p. x
[3] Ibid.

was widely adopted by scholars in the arts and humanities and has been particularly useful to developing thought about the relationship between our lived experience, ecology, and culture. Despite advances in naturalistic science and analytic philosophy, phenomenology has been 'set apart from other theoretical methods by its unique capacity for bringing to expression, rather than silencing, our relation with nature and the experience of value rooted in this relation.'[4]

Though a broad tradition with a vast number of concerns, there has always been a recurrent turn to ecological reflection in the work of 20th-century phenomenologists such as Husserl, and especially existentialist phenomenologists such as Martin Heidegger, Emmanuel Levinas, and Maurice Merleau-Ponty.[5] Husserl's early concepts of intersubjectivity, temporality, and perception were necessarily concepts dealing with relationships that were not subject to reduction or objective data. Heidegger resisted what he saw as Husserl's tendency towards subjectivism and worked to understand how our states of consciousness fit within and are shaped by a larger existence which we may not always be aware of. Merleau-Ponty challenged Cartesian mind-body dualism and changed the way 20th-century philosophy understood the centrality and primacy of the body and human language to perception. These foundational developments set the stage for the emergence of ecophenomenology as a cross-disciplinary inquiry in the 1990s at the junction of phenomenology and ecological thinking.

Ecophenomenology grew markedly out of the work of American philosopher, David Abram. Abram's widely read *The Spell of the Sensuous* (1997) introduced Merleau-Ponty's thinking to North American environmentalists by updating an American Transcendentalist writing tradition – itself with roots in German romanticism – with philosophical accounts of the body, writings on the perceptual implications of the technology of writing and language, and animistic thinking. The work expressed the concerns of many environmentalists at the time who were struggling to articulate the psychological and perceptual realities of global climate change.

Ecophenomenology thrives in part because of its rapid applicability and relevance beyond philosophy. This is especially true for therapy and arts practices. Therapists who wish to address the relationship between exposure to nature and psychological health have used ecophenomenology to develop an ecotherapy approach. Insofar as ecophenomenology helps us

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[4] *Eco-Phenomenology: Back to the Earth Itself*, eds. Charles S., Brown and Ted Toadvine (Albany, NY: State University of New York Press, 2003), p. xii.
[5] Ibid, p. xii.

interpret sensual experience, it is also of great use to artists who wish to engage ecological or psychological themes in their work. Ecotherapy takes psychotherapy from the couch to the woods, so to speak, redirecting 20th century psychology towards questions concerning man's relationship with nature. It begins with a fundamental belief that humans evolved as physiological beings in intimate contact with the natural world and that our cognitive abilities and our psychological health depend on intimacy with the patterns of the natural world. Our current build environments have left us with a wounded or undeveloped relationship with nature and many of our psychological and social problems stem from what a 'nature-deficit disorder.'[6] According to this definition 'nature-deficit disorder', when we cannot identify as part of nature, we have no integration in our identities and have a destructive and discordant relationship with the natural world instead of conceiving of it as integral to our well-being. Thus, ecological destruction constitutes self-abuse. To remedy this tendency, ecotherapists prescribe a mixture of scientific engagement with nature, Jungian depth psychology, and expressive arts. Abram specifically works with place-based song, dance, and mythopoetic storytelling. Despite its utility and appeal, the notion of a 'nature-deficit disorder' is not universally accepted. It has been criticized as a misdiagnosis that relies too heavily on a problematic 'fall-recovery' narrative and prevents a deeper engagement with the psyche and critical analysis of the cultural origins of our current relationships to nature.[7] Regardless, it is a prime example of how phenomenology has informed environmental thought and practice.

Phenomenology has also been crucial to the development of contemporary humanities-style philosophy of technology, one of the few examples of a philosophical branch that does not conform to Stiegler's central claim that thinking technics has been suppressed. Humanities-style philosophy of technology is distinct from analytical philosophy of technology by its focus on the nature and implications of technology as it relates to society.[8] Analytic philosophy of technology, which emerged separately in the 1960s, is analogous to a philosophy of engineering practice which attempts to understand technology through exploring how it relates to science and the central role

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[6] For a deep look at the concept, see Louv, Richard. *Last Child in the Woods: Saving Our Children From Nature-Deficit Disorder*. Updated
and Expanded edition. Chapel Hill, N.C: Algonquin Books, 2008.

[7] Elizabeth Dickinson, 'Ecocultural Conversations: Bridging the Human-Nature Divide through Connective Communication Practices', *Southern Communication Journal* 81, no. 1 (January 1, 2016): 32–48. https://doi.org/10.1080/1041794X.2015.1065289.

[8] Pieter Vermaas, and others, 'A Philosophy of Technology: From Technical Artefacts to Sociotechnical Systems.' *Synthesis Lectures on Engineers, Technology, and Society* 6, no. 1 (January 14, 2011): 1–134. https://doi.org/10.2200/S00321ED1V01Y201012ETS014.

design and team decision-making plays the emergence of technological artifacts. (Ibid) In general, though philosophical inquiry regarding technology is present from the beginning of Western philosophy, contemporary humanities philosophy of technology developed disproportionately to the rate of technological innovation. It surfaces in the 19th century, with the work of Ernst Kapp and becomes a concern for more philosophers throughout the 20th century, including John Dewey, Hannah Arendt, and Heidegger.

Heidegger's phenomenological approach to technology, which is central to Stiegler's project, is based on the idea that our contemporary way of approaching the world as shaped by technology amounts to seeing the world as a stockpile of resources for our use and disposal. Merleau-Ponty's approach to perception, Abram's largest influence, shows that our consciousness is always bodily, reciprocal, and environmental. This has implications for society insofar as the way we treat nature or environment is self-same to the way we treat each another and ourselves. Seen in this light, phenomenological thinking about technology and environment becomes a way to think about how we in the contemporary West relate to worldly phenomena in general and becomes an important tool to understand the technological genesis of our current ecological, social, and psychological crises. Contemporary philosophical approaches to technology[9] have largely extended the work of Heidegger and Merleau-Ponty, thinking with and against them to develop technological ethics and address technological disorientation.

Seeing how phenomenology has contributed thoroughly to the development of both contemporary environmental philosophy and philosophy of technology which embraces ecological thinking, it is worth asking why the fields remain segregated to the degree they do and why ecophenomenology and ecocrticism do not more actively incorporate technological thinking. For instance, Stiegler, despite his sophisticated and contemporary approaches to thinking the co-individuation of humans, technology, and environment, is largely absent in the literature of contemporary environmental philosophy. He is widely present across current media, arts, and culture scholarship and even works regarding technology and education, however, he barely

[9] For further information see works by Albert Borgmann, *Technology and the Character of Contemporary Life: A Philosophical Inquiry: A Philosophical Enquiry*.(Chicago: University of Chicago Press, 1987), Hubert L. Dreyfus, *What Computers Still Can't Do: A Critique of Artificial Reason* (Cambridge, MA: MIT Press, 1982), and Don Ihde, *Technology and the Lifeworld: From Garden to Earth* (Indiana University Press, 1990).

appears in ecocritical readers or works directly dealing with environmental philosophy. He receives one sentence on page 65 of the *Cambridge Introduction to Literature and the Environment* (2011), no mention in *Ecocritical Theory: New European Approaches* (2011), and no mention in *Routledge's Ecocriticism: The Essential Reader* (2015). Andrew McMurry[10] briefly mentions Stiegler in his broad-sweeping chapter on media determinism and ecocriticism in *The Oxford Handbook of Ecocriticism*, 'Media Moralia: Reflections on Damaged Environments and Digital Life' (2014). McMurry extends Stiegler's notions of cinematic consciousness and the capacity that the culture industries have for synchronizing behavior to new forms of media, stating that cinematic consciousness is giving way to a 'fragmented, saccadic drift of the Internet mind, open to the lure of personalized Google ads and on-click ordering buttons.'[11] McMurry reminds us that despite our hyper-connected technological circumstances '[...] ecocritics cannot go too far along the road with Kittler or Stiegler toward the media-determined situation.' According to McMurry, '[t]hey must continue to insist that biophysical reality forms the most profound determination of all.'[12] Additionally, McMurry mentions technology as pharmakon, clearly inspired by though with no explicit reference to Stiegler's work. He recalls Plato's Phaedrus, anamnesis and hypomnesis, to ask; 'does the hyper immediacy of the digital environment poison or enhance our relationship with the natural one?'[13] It is clear from the chapter that McMurry considers the need for ecocritics to better understand technology to be urgent and sees potential solutions in Stiegler's work. Despite this, he engages Stiegler's work only in passing and does not deeply engage any of Stiegler's arguments.

Considering the above, it seems safe to say that contemporary philosophy of technology is necessarily ecophenomenological while ecophenomenology has not been as concerned with integrated technology as deeply into its thinking. Where ecophenomenology does a better job is giving voice to non-human, non-technological beings (animals, plants, ecosystems). Ecophenomenology offers methods and insights that can help philosophers of technology discuss the relationship between non-human phenomena. In a world where the boundaries between

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[10] McMurry, Andrew. "Media Moralia: Reflections on Damaged Environments and Digital Life." In *The Oxford Handbook of Ecocriticism.* : Oxford University Press, 2014-08-21. http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199742929.001.0001/oxfordhb-9780199742929-e-025.
[11] Ibid, p. 496.
[12] Ibid, p. 497.
[13] Ibid, p. 492.

humans, technology, animals, plants, and environments becomes increasingly blurred, we need thinkers who can help make sense of relationships with tools appropriate to the synthetic nature of the phenomena. Luckily, increasing cross-fertilization between Europe and North American academic philosophy is bridging the gap, despite the cultural, linguistic, and disciplinary barriers that remain. For instance, French environmental thought is currently making its way into North American environmental philosophy thanks to translations and anthologies that encourage dialogue between environmental philosophy and continental philosophy.

Though Stiegler is yet to be included in much environmental scholarship, another, perhaps lesser-known French philosopher of technology and environment, Bernard Charbonneau, appears alongside the work of David Abram and other conversations about the relationship between Continental thought and environmental philosophy. In 2004's important volume, *Rethinking Nature: Essays in Environmental Philosophy*, Daniel Cérézuelle presents an introductory overview of Charbonneau, who 'is now considered by intellectual historians to be one of the founders of the French ecology movement.'[14] Charbonneau, alongside Jacques Ellul, wrote extensively on issues of technology, political ecology, and the dehumanization of man. In Charbonneau's thought, we use technology to escape the confines of nature, but in the process submit to a totalitarian system that undermines any previous hope we had to achieve personal freedom. The acceleration of the pace of modern life- and the complexity and chaos brought about by technologization- exacerbates our desire to control and 'results in organizations that are more and more powerful, but also more and more complex and, therefore, fragile.'[15] If we wish to have any chance at freedom, we need to better understand how the dialectic between system and chaos is agitated by rapid development, putting us in 'a paradoxical situation: a spirit of freedom has initiated techno-scientific and economic progress, but they result in the tendency towards strict social organization.'[16] Charbonneau implores us to reject the logic of rapid development and reorient our energies towards the cultivation of Nature and Freedom. It is useful to understand Charbonneau and Ellul as predecessors to Stiegler's work even though he never directly engages them, because they write extensively about the relationship between environment, technology,

[14] Cérézuelle, Daniel. "Nature and Freedom: An Introduction to the Environmental Thought of Bernard Charbonneau", in Rethinking Nature: Essays in Environmental Philosophy (ed. by Bruce V. Foltz and Robert Frodeman), Indiana University Press, 2004. p. 314.
[15] Ibid, p. 320
[16] Ibid, p. 321

societal control and spirit. This helps justify the case that Stiegler's technological critique of industrial populism is compatible with environmentalist discourse.

In conclusion, a survey of the literature reveals that though academic disciplines are increasingly cross-fertilizing, linguistic and cultural boundaries continue to shape the dynamics of transmission of information. The internet allows for quick communication, but geography and place still matter. The survey confirms that, as a cultural phenomenon, philosophy is very much shaped by the contexts in which it is produced. Modernist scientific endeavor has done a tremendous job generating coherence and concordance across the globe, however because contemporary philosophy, especially the phenomenological tradition, has problematized the epistemological validity of science, reconciling different philosophical traditions regarding environment and technology becomes a much more complex and delicate enterprise. Synthesizing these philosophies requires temperance, criticism, and a constant awareness of the utility and potential unintentional consequences of each new concept built. The metaphors of ecology and pharmacology are essential here.

Ecocriticism shows us that we need sophisticated approaches to nature to create environmentalisms that match our circumstances. Philosophy of technology shows us the unintended social and ecological consequences brought forth by the new technologies we build. Much contemporary environmental and technological practice still largely rely on a nature-culture and nature-technology binaries which fail to capture the complexity and dynamics of our experience of the world. This prevents meaningful environmental and social action and hinders ethical approaches to the development of new technologies. If the manner in which we conceptualize 'nature' and 'technology' shapes how we behave, then integrating these binaries and thinking non-dualistically about nature and technology opens meaningful reflection about technology and environment in a broader sense, one that incorporates psychology and the soul. If the urgent environmental crisis is fundamentally also a crisis of technology and of spirit, then we need academic work that addresses the political and technological disorientation and environmental confusion we encounter at the level of the perceptual.

The current literature associated with emerging environmental humanities and philosophy of technology shows that, despite shared ethical and political concerns and common philosophical origins, there is less interdisciplinary dialogue and cross-fertilization than one might expect, given that both disciplines drink largely from the same philosophical fountain. Given the interpretive

power of phenomenology and the rapid technological innovation at present, interdisciplinary at the crux of environmental humanities and philosophy of technology seems more useful than ever. There is a need to show the compatibility of philosophers from both disciplines. Comparing the work of Abram and Stiegler, then, becomes an important act both inside and beyond the academy.

Ecological and Technological reflection in phenomenological writing is quite normal and the two thinkers at the center of this dissertation are not as far apart as they might seem given a cursory look at their different linguistic, cultural, and disciplinary contexts. That their work potentially transcends these barriers is also cause for a conversation about how the philosophers who make up the larger organism of philosophy create their work influenced by dynamic and continual processes of individuation and how seemingly conflicting philosophies, from a larger view, constitute homeostasis in philosophy itself. This dynamic in mind, let us step through the gateless gate.

Chapter Two:

Abram and Stiegler's Vernacular Critiques of Technics

The aim of this chapter is to lay the necessary groundwork for exploring the implications of Abram's ecophenomenology alongside Stiegler's philosophy of technology. The main question is: To what extent is Abram's history of our linguistic and perceptual relationship to our environment mutually intelligible with Stiegler's thesis of originary technicity, general organology, and technology as pharmakon?

In order to proceed in the endeavor, we need to introduce the overall scope of their projects and the cultural, linguistic, and philosophical heritage which inform their basic arguments. After providing the necessary clarification of their propositions, we will then take a deeper look at Abram's critique of technics through his use of Merleau-Ponty's philosophy of perception and language and his engagement with the history of alphabetic writing. This will allow us to explore Stiegler's foundational concepts and analyze the extent to which their projects constitute vernacular iterations of a similar philosophy of technics, human origins, and spirit through participation. This analysis argues that the fundamental similarity in their philosophical projects permits and encourages a deeper relationship between environmental philosophy and philosophy of technology and that the keystone of this relationship is the philosophical gesture of a critique of origins through a reading of technics.

Abram's phenomenological scholarship is grounded in sensuous, bodily experience with clear, intimate vignettes of encounters with what he consistently terms the "more-than-human world". His work is noted for making a strong ecological case for increased and varied perceptual and linguistic engagement with nature and for revitalizing animistic thinking. His writings explore the possibility of repairing our relationship with the living, breathing earth by developing an environmental ethics which emerges from a type of direct engagement and reciprocity with the world that he claims was and is typical of oral cultures. Writing at the end of the 20th century, he offers readers a genealogy of our current ecological crisis based in a critique of the technology of writing and its effects on our perceptual and linguistic relations to the world around us. His work is explicitly motivated by a desire to revitalize ecological concepts and environmental philosophy in the US which he believes were conceptually impoverished at the time.

According to Abram, we can reinvigorate our relationship to the world and cultivate a sense of responsibility for life by acknowledging that the earth we inhabit and which we also constitute is animate and in a continual process of creation or becoming. The way we story our relationship to the earth changes the way we relate to it. If we choose to tell stories of mechanistic Darwinism or radical social constructivism and relativism, we miss out on a tremendous opportunity to relate to the "more-than-human" world in an animistic, reciprocal, and reverent way that Abram claims is common to oral cultures. This reciprocity typical to oral cultures was characterized by a tendency to speak directly to nature and not about it.

We lost this reciprocity when we became increasingly enchanted by our own self-referential systems of phonetic alphabets, which slowly severed our connection to the earth around us and prevents us from understanding perceptual, bodily encounters with our surroundings as a meaningful source of information. This resulted in a narrowing of our sense of meaningful engagement with the sensuous reality of the earth (with an abandonment of a phenomenological and mystical approach to reality). Re-animating the earth around us requires meditating on an ontology that permits continual connection and emergence.

Abram brought the thought of Husserl, Heidegger, and Merleau-Ponty in dialogue with North American environmentalist writing to claim that the ecological origins of our language and perception has been largely forgotten. Around the same time, in the late 1990s, Stiegler was coming into notoriety in France for an analogous but distinct claim that the question of technology has been suppressed in the history of western philosophy- that philosophers have ignored that our consciousness is technological to begin with.

Stiegler's writings encompass over 30 books, dozens of articles, online lectures, and public talks. His overall project amounts to a post-Marxist critique of capitalism through a critical reading of the history of technics. Many of his later writings are applications of his earlier works to contemporary public or political issues. They are increasingly dependent on his foundational texts, which makes them highly self-referential and occasionally redundant. His foundational arguments, in which he argues that technics have been the repressed question throughout the history of philosophy despite being fundamental of our ability to retain memory and to think, are in his *Technics and Time* series. He offers three main concepts iterated across dozens of books, articles, and public lectures: 'originary technicity', 'general organology', and 'pharmakon'.

The first concept, 'originary technicity', is a bold ontological claim about the nature of humans. Stiegler defines humans as 'always, already technological' which he uses as the basis of an argument that our consciousness and our physiology, and thus all philosophical inquiry, has always been shaped by technology. To Stiegler, since Plato, philosophers have remained blind to how much their own thinking comes after and fundamentally depends on technics. Stiegler then explores the dynamics of how human physiology and neurology and society have coevolved. To Stiegler, human consciousness- our awareness of time and space and our continued and institutionalized search for our origins- is inseparable from technical prosthesis. Understanding this can help us overcome the violence which often results from our obsessions with origins and permit post-ontological engagement with life which will help us orient ourselves in a hyper-attentive and symbolically liquidated modernity.

Lastly, his extension of Derrida's concept of 'pharmakon', a conceptual tool for assessing the positive and negative consequences of a phenomenon and how society uses that phenomenon as a scapegoat for its ills, allows Stiegler to move past the more conservative tendencies in the works of thinkers of technology like Heidegger. By thinking technology pharmacologically, Stiegler delivers readers into a paradigm and eventually a political manifesto of expressive participation with new technological forms which he argues is the most reliable way to triage our disorientation and work our way through malaise and back into a life of spirited community.

Importantly, both authors offer their projects as a challenge to contemporary philosophy to more-critically engage technics in order to become relevant beyond itself. Reflecting this concern is their commitment to repairing the psychological and social circumstance of their fellow man through philosophy is the development of associations that engage their work publicly. Stiegler is an increasingly popular public intellectual in France with growing impact in the English-speaking world. He is the founder of the association Ars Industrialis (Association Internationale Pour Une Politique Industrielle Des Technologies de l'esprit')[17] and Pharmakon.fr, a philosophy school in Epineuil-le-Fleuriel (École de philosophie d'Epineuil-le-Fleuriel). In 2006, he became Director of the Department of Cultural Development and later Director of the Institut de recherche et d'innovation (IRI) at the Centre Georges-Pompidou in Paris. Abram created the Alliance for Wild Ethics (AWE) "a consortium of individuals and organizations working to ease the spreading

[17] *Ars Industrialis* (online blog), Accessed November 11, 2018, <http://arsindustrialis.org>

devastation of the animate earth through a rapid transformation of culture."[18] His site serves as the digital home of a growing movement of artists, media makers, philosophers, and educators who are dedicated to broadening and deepening our engagement with the world in an effort to counteract environmental degradation and crisis of the spirit.

Their public engagement is coherent with their philosophies of reciprocity and participation and is interesting in what it can teach us about the way philosophy is shaped by technology. It is, however, also necessary to understand their projects in pharmacological terms. Before critiquing the potential consequences of their work, we must first enter into their work to understand how their critiques of technics represent parallel attempts to overcome the burden of post-structuralist philosophy.

Both Abram and Stiegler approach similar subject matters while having similar underlying structures to the way they build their philosophies. That they create similar work in different writing styles and ultimately offer somewhat divergent solutions to the problems they present begs a conversation about the importance of having vernacular and overlapping critiques of technics which form constellations in philosophy that can bridge disciplines. A look at how each builds his arguments is the next preliminary step to having that conversation about philosophy in the 21st century and to testing the limits of their works in tandem. How did Abram build one of the first ecophenomenological critiques of poststructuralist philosophy of language via a reading of technics, and how does Stiegler's extension of the work of Heidegger and Derrida offer new ways of understanding how technology shapes the way we relate to our environment?

[18] "The Alliance." *Alliance for Wild Ethics* (online blog), Accessed July 28, 2017. <http://wildethics.org/the-alliance/>

Abram's Critique

Merleau-Ponty, the Phonetic Alphabetic, and the Wisdom of the Body

We can take Abram's first and most influential book, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, as representative of the core of his thinking. Despite the fact that he has continued to produce scholarly articles and nonfiction writing which extend his work into related topics such as zoosemiotics or the perceptual experience of becoming animal (in the Deleuzian sense of the term), it is this book which gives us the clearest means of identifying Abram's original contributions to philosophy. Abram is transparent about his philosophical aims to extend the work of Maurice Merleau-Ponty into the environmental realm. A close reading of his text will identify anchor points with which we can later engage his work with that of Bernard Stiegler.

The book begins with a personal introduction- an autobiographical narrative which serves the dual function of acclimatizing readers to Abram's literary language and telegraphing his phenomenological approach to perception and to the production of knowledge. Abram presents his philosophical project as necessarily autobiographical and experiential, an outcrop of his academic background in environmental studies and his time spent as a sleight-of-hand magician and researcher in traditional medicine alongside shamans and medicine men in Indonesia and Nepal. According to Abram, important to the genesis of his project is the fact that the new perspectives he gained about the relationship between shamanic and medicinal practice, language, and environment are what had definitively shifted his academic interests from the study of ecology to the study of phenomenology and philosophy of language, as a means of advancing an environmental ethics at a perceptual and psychological register.

In his own account, Abram turned to phenomenology in an effort to bridge the gap between what he perceived to be a linguistically and conceptually impoverished environmentalism- which was at the time still relying on a false nature-culture binary- with the academic work in the field of ecology, the then-burgeoning Gaia theory credited to chemist James Lovelock and microbiologist Lynn Mergulis. Gaia theory is founded on the idea that the Earth is 'a self-regulating system made up from the totality of organisms, the surface rocks, the ocean and the

atmosphere tightly coupled as an evolving system.'[19] In many ways, Abram acts as translator or diplomat. He manifests aspects of Gaia theory in a phenomenological mode while curating phenomenological ideas to readers who might find phenomenological language opaque and deterring.

Abram's basic procedures throughout this section is to systematically demonstrate how phenomenology can help us to overcome the epistemological and ontological limits of both overly rational Western scientific and philosophical thought and inadequate spiritualist or new-age thinking. To do this, he introduces a phenomenological concept (predominantly from Merleau-Ponty, but also from Husserl and Heidegger), explains ways in which Western scientific or philosophical traditions have inadequately addressed the problem, offers dominant counter-narratives from environmental philosophy or new age thought, then demonstrates how, despite superficial differences, the counterpoised positions are actually the same in type. He then returns to the phenomenological concept as a meaningful alternative, which he illustrates with vignettes of perceptual or linguistic encounters with non-human subjects.

In this way, Abram introduces uninitiated readers to phenomenology through a brief tour Husserl's concepts of the life-world and intersubjectivity, en route to the work of Merleau-Ponty. Firstly, following Husserl, he addresses perception as a reciprocal and participatory act between subjectivities. He argues that though many philosophers tend to think of subjectivities as uniquely human phenomena, closer examination reveals that animal subjectivities, and by extension of the same logic, any phenomena which is perceived, is necessarily also co-creating our perceptions. In this regard, perception is equated to participation. This, for Abram, justifies a phenomenological approach as an effective means by which to explore the root causes of our broken relationship to nature, because that relationship is shaped by what we understand to be the nature of perception. By allowing for non-human intersubjectivity, phenomenology, he claims, is concordant with the animistic way oral peoples experience the world, something which has been largely eclipsed in the literate West. In later chapters, he goes on to frame phenomenology as an attempt to return to preliterate ways of sensing, but before he makes that claim, he turns his attention to exploring the origins of this perceptual shift.

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[19] Lovelock, James. 2009. *The Vanishing Face of Gaia: A Final Warning*. New York: Basic Books. p. 126

The key difference for Abram is the distinct use of language. Following Merleau-Ponty, Abram sees human language fundamentally as an affective physical gesture originating in the carnal body and from which semantic meaning only later emerges through a complex process of appropriation and abstraction. Sensuous encounters with the world are thus pre-theoretical and pre-linguistic; our bodies are constantly sensing and perceiving the world independent of our linguistic engagements and they are in ceaseless conversation with other bodies and with the larger body of the world. Oral peoples for centuries, and still to this day, understand language in this way and use it to speak directly to the world around them as an act of physical and spiritual reciprocity, whereas literate people have come to speak primarily about the world in increasingly abstract and calcified language. The fundamental differences in what we understand language to be and how we choose to use language is a crucial paradigm for understanding how we have become cut off from reciprocal sensuous engagement with the world and explain how we have come to view the world largely as an inanimate store of resources existing for our consumption and disposal.

Going deeper into philosophy of language, Abram introduces Merleau-Ponty's concept of the 'Flesh'- an ontological proposal concordant with the environmental term 'biosphere' and confirmed by ecological science- as a terminal critique of the linguistic science of Ferdinand de Saussure. Saussure famously distinguishes between *la langue* and *la parole*, offering that signs do not signify referents, but instead serve as markers of distance or difference from other signs. By showing how human speech emerges from bodily experience and is embedded in a larger matrix of the experienced world, Merleau-Ponty critiques de Saussure's philosophy by showing that expressive speech acts are fundamentally corporal phenomena. Physical mimicry of phonological and expressive emotional phenomena is the primary way humans learn language and the structures of language emerge later as the 'sedimented result of all previous acts of speech.'[20] Just as human speech is a bodily phenomenon, human language is an expression of a broader ecological phenomenon and speech acts are continually created in dialogue with the expressive speech of the Earth itself. Human language is intimately formed by the language of non-human actors in a complex process of co-creation. This is evidenced, for example, by the relationship between the phonological profiles of human language and the sounds of natural landscapes.

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[20] Abram, David. *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*.. New York: Vintage Books, 1997, p.84

Abram uses Merleau-Ponty's critique to make the environmentalist argument that if the source of creativity in human language depends in part on the stimulus we receive from our encounters with the speech of the world (birdsong, wind, rushing water), then ecological degradation manifests itself in the poverty of modern language. Literate peoples rely increasingly on fossilized language structures and no longer see language as a way to directly commune with environment. In this, Abram claims that for modern literate people like ourselves, there is a 'double-withdrawal' from the world- simultaneously linguistic and perceptual. Abram wishes to understand what the root cause of this rift might be. In order to do so, he creates a historical account of how this difference in language use and perceptual engagement might have co-evolved as part of the same process. His account centers around the development of the technology of the phonetic alphabet as the main cause behind our sense of displacement and disconnect from sensuous encounters with the world that we co-create in a reciprocal and participatory act of perception. Abram makes the case that our relationship to the written word directly corresponds to our treatment of nature, and thus rediscovering the sensual foundations of oral speech is an effective way to advance environmental ethics at the level of the perceptual in so far as it revitalizes animistic thinking.

Abram's section, *Animism and the Alphabet,* begins by noting that many scholars in the past have attempted to understand our destructive relationship with nature. Some attempt to explain the phenomena as a facet of human nature, which to Abram, grossly ignores the fact that indigenous oral cultures from around the world have lived in ecological harmony for centuries (if not millennia). Other scholars try to explain the ecological disharmony as a byproduct of either Platonic essentialism of ancient Greece or resulting from the transcendental metaphysics of the ancient Hebrews. Abram notes that despite being different cultures in most aspects- geography, climate, social organization- these two cultural groups which have given rise to our current culture share a reliance on the technology of the phonetic alphabet. This sets the stage for his investigation of how the way both cultures used the written word changed the way they relate to perception and to the environment.

For Abram, the written word, just like human speech, exists first and foremost as an ecological phenomenon. In the same way that the more-than-human world speaks out through animal calls or howling winds, these subjectivities also are involved in deep acts of writing. He gives multiple examples of the traces and marks left by animals in the snow or mud and the forms

of rivers and rocks, all which have the property of legibility- they are all readable phenomena. We have always been engaged in a reading of these landscapes and animals, and our survival as a species is proof of our faculties and general success in employing them. Our writing systems evolved as a direct result of the writing that was already taking place in the world.

Showing that all human writing has its origins in the activity of non-human or more-than-human subjectivities is Abram's first direct ecological or ecophenomenological critique of post-structuralist philosophy of writing. He understands the 'meaning' of all written signs- be they animal tracks or letters- to be an encounter with the 'Other', equal to a 'meeting'. These philosophical terms are a way to directly engage with Jacques Derrida's work, *Of Grammatology*. Abram here is addressing Derrida's concept of *différance*, the process by which it is impossible for there to be any true encounter between the author of a text and the reader of a text because the actual 'meaning' of a given text is tied up in a process of infinite differentiation and deferral to the meaning of other texts. Behind every text is another text. To Abram, Derrida's argument is functional insofar as 'one maintains that the other who writes is an exclusively *human* Other, only if one assumes that the written text is borne by an exclusively human subjectivity.'[21] Abram challenges Derrida's claim by reframing writing in ecological terms. Derrida postulates that we can never encounter the Other, but Abram claims that when animal subjectivities constitute this Other, we indeed do directly encounter the Other specifically as the mystery that always already is and always will be. Put differently, because the very nature of this more-than-human Other is fundamentally a mystery, our reading of more-than-human texts (footprints, fur sheddings, geological patterns) precisely constitute a 'meeting' with their 'meaning'. The consequence for this notion is that all human texts are traceable back to texts of more-than-human subjectivities and thus the 'meaning' of a text *is* the 'meeting' with the mystery that is life before verbal interpretation or reflection.

In order to make his critique, Abram works backwards in time tracing the origin of literary texts back to animal markings and other worldly forms. This sets the stage for an ecological retelling of the history of the development of the phonetic alphabet. By most measures, Abram follows the conventional scholarly accounts of Walter Ong, Jack Goody, and Marshall McLuhan. He contributes to their work by framing writing as emergent phenomena of the world itself, a technology which emerges from what Merleau-Ponty's terms "the flesh of the world," and

[21] Ibid., p. 282n2

discussing the consequences of each stage of this evolution for perception and engagement with a more-than-human world. His overall thesis is that with each successive stage of the development of writing, the dependence of written characters on existing physical referents became more and more obscured, leading eventually to a phonetic system based on marks which represent mouth sounds and refers its users exclusively back to themselves. This shift in referents from the more-than-human world to our own selves turned writing from a window to the world into a mirror, cutting us off from our surroundings and launching us into a way of being that is increasingly abstract and self-referential. Our unprecedented self-referentiality eclipses our intimate engagement with the world around us and leaves us cut off from the relationships that nourished us throughout our evolutionary history.

Abram's emergent alphabet begins with 'our own tracks, our footprints, our handprints in mud or ash pressed upon the rock.'[22] By his account, we traced these bodily and worldly forms as a way to participate with the world around us, eventually transforming these shapes into imagistic petroglyphs. These rock and cave paintings are not specifically tied to speech and so are conventionally considered to be a form of proto-writing. Writing becomes related to speech with the hieroglyphic writing system of Egypt and with its Chinese and Mesoamerican counterparts. These systems contain ideograms- picture-symbols which represent not what is depicted realistically, but instead represents a quality associated with the thing that is pictured. Abram sees this as the first step directing our attention away from our sensorial engagement with the world the pictures represent and towards the images themselves. These systems proved useful, but not fully adequate to represent abstract concepts and so scribes began to create rebuses- visual allusions to speech acts; Abram himself describes rebuses as visual puns. For Abram, the emergence of rebuses represents an important shift in the function of writing systems. For the first time, visual representations began to represent specifically the sounds of human speech instead of the meaning of the utterances. Because of many reasons, including the utility of rebuses for commerce between peoples who speak different dialects, the rebus principle did not catalyze into fully phonetic speech immediately or fully everywhere. It finally did, however, in the ancient Middle-East among Semitic peoples who, recognizing the relationship between consonants and breathed sounds, developed a system for representing each of their consonant sounds with a corresponding image.

[22] Ibid., p. 96.

It is with the development of the Semitic *aleph-beth* that Abram sees an increasing separation between nature and culture. Abram points out the shift, noting that up until this innovation,

> *'[t]he sensible phenomenon and its spoken name were, in a sense, still participant with one another'* whereas with the *aleph-beth*, 'the written character no longer refers us to any sensible phenomenon out in the world, or even to the name of such a phenomenon (as with the rebus), but solely to a gesture to be made by the human mouth.'[23]

The key point for Abram is that by shifting the function of the image from the representation of worldly phenomena to the representation of human vocal utterance, this new writing system reroutes the path of association and excludes the participation of the thing pictured. This symbolic '*bypassing*' is the key to understanding the origins of our tendency to ignore our relationship to phenomena. For the first time '*the larger, more-than-human life-world is no longer a part of the semiotic, no longer a necessary part of the system*.'[24]

After making this bold and convincing claim, Abram adds a caveat. Insofar as Semitic letters themselves were derived from pictographs, they do still maintain a reference to worldly phenomena (he gives the example of the *aleph* as the upside-down head of an ox, which was corresponded to the name of the letter). These links, however, are much more fragile and vestigial- they have become non-essential components of the communication process. To exemplify this shift, Abram points to Old Testament writings in which the animals and natural phenomena that once spoke directly to humans had already begun to grow silent. For the ancient Hebrews, language was beginning to be understood as a uniquely human capacity. This is crucial to Abram's later reading of the development of a world-view of human exceptionalism which emerges in dominant Judeo-Christian culture, but is notably and importantly absent in Jewish mystic traditions.

The final step in the shift away from reciprocal and sensorial linguistic engagement with the wider world and towards increased abstraction occurs when Semitic script makes its way to ancient Greece. The Greek scribes, adopting the shapes and names of the Semitic letters, were unable to retain their original pictorial meanings. Thus, anyone reading the new Greek alphabet

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[23] Ibid., p. 100. Italics original.
[24] Ibid., p. 101. Italics original.

was participating in a wholly abstracted writing system that was entirely phonetic and with no remaining understandable reference to the larger world.

Abram pauses his history at this point in order to elaborate how the shift from oral culture to a culture dependent on phonetic writing systems fundamentally changed our relationship to memory, to the way we used language, and to nature. He goes deeper into other aspects of the linguistic issues in later chapters, focusing on the physicalization of sounds and the role of the breath. The remainder of the section at hand, however, focuses on linking the history of the alphabet back to Merleau-Ponty's earlier concerns about the participatory nature of perception and to introduce his vocabulary of 'flesh' and 'chiasm'. Chiasm is a term primarily used to refer to the symmetrical structure of a narrative which was common to ancient literature and oral poetry as a pneumonic and literary device. Merleau-Ponty adopted in order to express the "bi-directional becoming or exchange between the body and things that justifies speaking of a 'flesh' of things, a kinship between the sensing body and sensed things that makes their communication possible."[25]

In order to explore this bi-directionality inherent in the becoming of the world, Abram detours through a comparison of Plato's *Phaedrus* to the epic ballads of Homer. He follows closely the work of Harvard classicists Milman Parry and Albert Lord and British classicist Eric Havelock in his reading, in which the Homeric epics represent the thinking of oral peoples (for reasons explained below) while Plato's *Phaedrus* story represents the origin of our modern Western approach to nature, which is decidedly more abstract and analytical. Abram illustrates this shift along two main themes. His reading centers around the way language in the two tales is a window into conceptions of nature, the way nature functions as a narrative device in the Homeric epics, and the critical attitude to nature depicted in *Phaedrus*. He also shows how the different styles represent a different relationship to memory and cognition.

In the early 20th century Parry and Lord, according to Abram, provided us with deep analysis of the Homeric epics. He showed that the repetitive literary devices used in the *Iliad* and the *Odyssey* were actually a thoroughly developed technique of memory common to oral bards. This was essential to forming his hypothesis that the ballads were essentially literary transcriptions of oral modes of storytelling. Later on, in the 1930s, Parry was able to confirm this position through

[25] Toadvine, Ted, "Maurice Merleau-Ponty", The Stanford Encyclopedia of Philosophy (Spring 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2018/entries/merleau-ponty/>

a study of Slavic singers, who largely relied on the same techniques as the Homeric ballads in their own songcraft. Abram continues, showing us that Havelock's career was based entirely on a rethinking of the culture of Ancient Greece as a response to the shift from orality to literacy, with profound implications for our understanding of the nature of the Western Philosophy tradition.

In Abram's rendering of Parry and Havelock's ideas, the fundamentally oral ballads of Homer are completely dependent on rich natural imagery. The actions and moods of the gods portrayed within always coincide with changes in nature. The plot only advances in tandem with changes in nature- the changing status of characters occurs not just as metaphoric but also literal shifting tides. The way that emotional changes are equated to natural phenomena, shows for Abram, that pre-literate ancient Greece had a clearly animistic approach to the world. Aspects of the *Phaedrus* story, however, show us a radically less animistic conception of and relationship to nature emerging at the time. Abram's sees a deep contrast in the way Socrates relates to the natural world outside the confines of the city walls of Athens with what a later criticism of the technology of writing embedded within Socrates' telling of the legend of the Egyptian King Thamus. Early in the tale, Socrates openly declares his position that he views the company of his fellow philosophers as a superior environment to the countryside for the purposes of learning. Later on, however, he offers up a cautionary tale, recounting Thamus's reaction to the new technology of writing. Thamus directly criticizes a newfound reliance on written word. For him, writing as an externalized memory aid is the downfall of the mnemonic capacity of man. This allegory echoes Parry's findings regarding the Slavic singers. Upon transitioning to literacy, their ability to memorize and repeat information had become severely diminished.

Abram links this to Havelock's understanding of Socrates' dialectic method of challenging his students to think. He presents us with Havelock's notion that Socrates method 'was primarily a method for disrupting the mimetic thought patterns of oral culture.'[26] As Abram tells, up until Socratic times, any act of speech was a locally situated phenomenon that was 'inseparable from the endlessly repeated stories, legends, and myths that provided many of the spoken phrases needed in one's daily actions and interactions.'[27] In this regard, all memory was tied up in a continual process of storytelling. The storage of linguistic cultural memory occurred entirely within a matrix of continually repeated and revitalized stories. It was not 'exosomatizeable', to

[26] Abram, *Spell*, p. 109.
[27] Ibid.

borrow and expand a term from Stiegler. Thus, when Socrates would challenge his students to reflect back upon what they had just said, he was asking them to divorce the ideas of their words from the act of speaking itself. Asking people to distance themselves from their ideas was a fundamental displacement of the speaker and the idea enabled by the increased cultural influence of written words. This also served the function of removing knowledge from its situational context, explaining the rise of Platonic 'essences'. Abram explains that whereas ideas were up until that point 'experienced as living occurrences, as *events*, [...] as soon as such utterances were recorded in writing, they acquired an autonomy and a permanence hitherto unknown.'[28] Neither Abram nor the classicists see Socrates' and Plato's methods as the original cause of this shift. Instead they understand them as representative of a larger trend occurring at the time. The important thing to note is that the birth of Western Philosophy represents the initial interface of oral and literate approaches to the world.

Completing his reading, Abram returns to Merleau-Ponty to address the phenomenological implications of literacy. He positions Merleau-Ponty's bodily phenomenological perspective as a deep challenge to common literary theory and the post-structuralist philosophical accounts of literacy. According to Abram, the question of the more-than-human origins of our written word has been suppressed since the beginning of Western Philosophy and thus, 'without a clear awareness of what reading and writing amounts to when considered at the level of our most immediate, bodily experience, any "theory" regarding the impact of literacy can only be provisional and speculative.'[29]

Abram later expands Merleau-Ponty's ideas to our understanding of space and time, however perhaps his most important implicit claim, hinted at above, is that the body is the necessary pathway to developing theory to help us understand the relationship between consciousness, language, and environment. In critiquing the influence of technologies of writing and calling for the primacy of the body, Abram offers a challenge to philosophers to critically assess the extent to which their thinking relies on technics. That he does so without ever mentioning that his book constitutes a philosophy of technology is notable and begs questions about how environmental philosophy at the time was unequipped to think technics. Insofar as Abram's claim suggests a

[28] Ibid., p. 110.
[29] Ibid., p.124.

'suppression of technics' in environmental philosophy at the end of the 20th century, it opens a natural link to Stiegler's project.

Abram claims that the technologies which form the basis of our thinking and memory obscure the ecological and bodily origins of our consciousness and diminish our ability to think and act reciprocally with our surroundings. Bernard Stiegler founds his philosophical project on a similar proposition. He argues that Western philosophy has largely suppressed the degree to which its very operations are dependent on its technological origin- that thinking is necessarily technological and that any understanding of technology must begin with an acknowledgement of this dynamic. This conceptual and structural parallel between their philosophies provides the necessary entry point to understanding the ways in which Stiegler's main concepts are fundamentally aligned with Abram's reading.

Stiegler's Critique
Originary Technicity, General Organology, and Pharmakon

Stiegler's writings consist of a continuously expanding corpus of books, articles, online lectures, and public talks, the latter of which tend to branch out and apply his thinking to a number of contemporary issues. As a counter-measure to this gregariousness, we can focus in on the core of his philosophy by looking primarily at his three foundational concepts and the way he builds them by extending the work of his predecessors. Stiegler's *originary technicity* is a philosophical anthropological proposal that attempts to justify the assertion of the question of technics in philosophy by demonstrating how technics have shaped our physiology and consciousness in an evolutionary dynamic which predates the institution of philosophy. His *general organology* is a means to theorize the ongoing individuation processes of social, technological, ecological and psychological beings and speak to the relations between those beings. Individuation here is an ontological and psychological concept which speaks to the process by which a thing differentiates and is identified from other things. Stiegler's contribution to the concept comes from the way he deploys it simultaneously at three primary registers; the psychic/neumonic or "I"), collective/social or "we", and the technological. By attempting to think identity and difference at multiple registers at the same time, Stiegler is able to explore how constituent parts of the human body (vital organs) relate to constituent parts of technical systems (artificial organs, technological prosthesis, or tools) which are both joined by organizations which also undergo individuation on a social and psychological register. This aesthetics of never-ending individuation applies Derrida's thinking of *difference* to technology and organizations. Lastly, Stiegler also extends Derrida's notion of *pharmakon* to show how we must think the ambivalent qualities of technology in order to orient our relation to it and engender nooetic (intellectual, spiritual) endeavor *through* the very technologies which disorient us.

In his first published book, *Technics and Time 1: The Fault of Epimetheus* (1998), Stiegler explores the perceptual implications of our complex technological environments. The book begins by presenting a narrative of how human origins coevolved in relation to technics. Stiegler elaborates this central thesis by extending Heideggerian technics alongside the work of philosopher Gilbert Simondon, paleoanthropologist André Leroi-Gourhan, and historian of

technology, Bertrand Gille. Bringing together these thinkers, Stiegler challenges our understanding of the experience of time, arguing that technics are forms of inorganic and organized matter that form an externalized human memory and fundamentally constitute human temporality. He claims that because our physiology and neurology coevolved always in relation to technics, our entire notion of temporality is only, and has only ever been, accessed via technics. This epistemological claim is a means of critiquing and expanding Heidegger's work to propose a type of Dasein whose relationship to temporality is completely and always shaped by technics.

Stiegler, following Husserl, continues, outlining a basic framework for the relationship between increasing technology use, increasing abstraction of thought, and the degradation of memory. Here, Stiegler focuses on numeracy. He criticizes the shift from geometric thinking to algebraic thinking catalyzed by the technology of numbers, or the process of numeration, claiming that it "is a loss of originary meaning and sight, a loss of the eidetic intentionality that underlies scientificity as such…"[30] This loss is a type 'eidetic blinding', which, according to Stiegler, is a way by which we become increasingly displaced from meaning which relies on mental imagination of the physical world, and instead towards an method of inquiry, or a science, that is "meta-physical". This metaphysical thinking is a direct result of the "technicization" of science, which, in Stiegler's words, "… is what produces loss of memory, as was already the case in Plato's Phaedrus."[31] Stiegler uses the Phaedrus dialogue to illustrate the contrast between hypomnesic logography and anamnesic memory, or between written record and recollection of experience. It is this fundamental tension which Stiegler uses to define our relationship with technics as organological and pharmacological. in Stiegler's broad definition, technics are beings which consist of organized inorganic matter, which evolve in relationship to humans and environment, and which form how we experience time and thought. The human condition is 'always already technological', proceeds through a co-evolutionary process with technical prosthesis, and is fundamentally both oppressive and empowering, offers a more nuanced assessment. This, he argues, resulting in a general proletarianization which is exacerbated by cognitive technologies, but also new opportunities for creative expression.

[30] Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus* (Stanford: Stanford University Press, 1998), p. 3.
[31] Ibid.

Continuing his argument, Stiegler identifies where the question of technics lies in Heidegger's work. Calculation is using the facts of the world to address one's concern for the future (for death). Our calculative approach to nature represents an attempt at control and domination of nature. This calculative approach stems from our historical engagement with technics. Technics allow us to gain control over our situation as temporal beings who inherit circumstance and anticipate the unknown circumstance of our own deaths. The shift from reason to calculation, what Stiegler refers to as the mathesis universalis of the Enlightenment, constitutes the shift in philosophy into a technical age. This technical age in philosophy "[...] brings subjectivity to its completion as objectivity."[32] Showing the link between metaphysical thinking and instrumentalization is how Stiegler makes his argument that thought is constituted by technics, that "[t]he *modern* age is essentially that of modern *technics*."[33]

Stiegler, building his case for the pharmacological nature of technics, identifies an essential ambiguity in Heidegger's work on technology, showing that in his earlier and most quoted works, technics are presented as the barrier to thinking and being, whereas in later works identify technics as that which enables thinking the nondual nature of time and being. Thus, Stiegler identifies in later Heidegger a shift into "thinking being without beings—that is, without Dasein."[34] Stiegler then shows how this opens up Heidegger's thinking of technics beyond 'end and means' by exploring how Aristotle's four causes of being may or may not apply to technics. For Heidegger, technics are not just means to a calculative end, they also have the ability to reveal truths, to disclose or unfold something that is hidden in the world. This capacity of technics for artistic or poietic ends is its value for authentic being. Stiegler intervenes here to define modern technics as those technics which do not primarily express the tendency for disclosure and being, and instead primarily function as a tool of the calculative reason of metaphysics. The irony here, according to Stiegler, is that in the name of control and dominion over nature and being, we use technics in a way that divorces us from nature and thus makes us more subject to the control of the tools we have invented. In simple terms, in forgetting that we are part of the nature we seek to control, we forgot that we are subject to the properties of the tools and techniques we design.

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[32] Ibid, p. 7.
[33] Ibid. Italics original.
[34] Ibid.

This line of argument shows how thinking technics in a nondual way constitutes environmental thinking. Once we identify as the nature we calculate, we can articulate in a sophisticated and analytical language the fact that the way we treat nature is necessarily the way we treat ourselves. This underlines the importance of reciprocity as a conceptual tool in Abram's work which is parallel to Stiegler's understanding of and general call to active participation in the creation of symbolic forms which link humanity. If technics serve us best when fulfilling the function of revealing truths, then reciprocity becomes a foundational principle for an ethical use of technology, and, by extension, a basis for an artistic or poietic engagement with technology which elevates it to artistic purposes. Bringing together the calculative approach to technology with the artistic approach in a way which respects both purposes is thus the challenge for a 21st century philosophy of technology.

Thinking technology thus becomes a philosophical bridge between the sciences and the arts. Instead of an enemy to science or to the modernist project, phenomenology becomes a means of deconstructing the barriers between the arts and sciences, thus invigorating or reenchanting modern science by showing it how to return to its edic origins in ratio. Phenomenological explication completes its deconstruction of modernist science and metaphysics via the reconstitution of its origins in subjective imaginary. Put optimistically, Phenomenology has opened the pathway for 21st century thinkers to rediscover reason, imagination, and participation as essential, but forgotten, methods in science. The task of an ecophenomenology which embraces technics, is discovering and inventing instances of the synthesis of scientific and artistic modes within the context of reciprocal and sensuous engagements with the more-than-human world. This means teaching ourselves to identify how technics shape our calculative behaviors and to show ourselves the full pharmacological limits of this disposition- exploring how modern technics drive us towards both absolute control and artistic revelation while at the same time subjecting us to that control and revealing aspects of ourselves. Articulated in terms of narrative, writing phenomenology means telling the same story multiple times and upon each iteration shifting the protagonist from humans to technics to nature, showing that the dynamics of control and revelation are nonlinear.

Stiegler then presents how Heidegger's ontology of technology was adapted and potentially misunderstood by Marxist approaches put forth by Frankfurt School theorists. He focuses here on how Jürgen Habermas extends the theses of rationalization of Herbert Marcuse. Marcuse argued

that the rationalization which once formed a means of liberation from the bounds and threats of nature eventually came to permit a domination on the political level- that rationalization had become the guise of political domination. Marcuse uses this assessment as the basis to argue for a science which avoids the dominating tendencies of technics and is in communion with nature, which Stiegler sees as an 'error of interpretation' of Heidegger's thesis.[35] Stiegler shows that in light of Marcuse, Habermas claims that technicization of rationality and communication becomes a means of hiding political domination inside of societal institutions, thus supplanting the societal norms of traditional societies with external control forces typical to modern life. Habermas creates an ideal of 'communicative action', a liberated form of communication which he contrasts to the instrumental reasoning at of our institutions. Stiegler sees this attempt of '[...] liberating communication from its technicization," as a form of analysis which remains indebted to, or 'haunted by', the "founding positions of philosophy."[36] Stiegler criticizes Habermas here by showing how although Habermas is in accordance with Heidegger that language becomes perverted through technicization, Habermas misses that Heidegger had transcended the metaphysical conceptualization of technics as a means in favor of an attempt to think technics as a being which co-constitutes our consciousness. Stiegler sees in this aspect of later Heidegger's analysis the seeds of a thinking which skirts the need for metaphysics and permits us to think through the relationship of technics and time in a way that echoes but is "larger than the constitutive relationship between writing and citizenship."[37] This is the ontological foundation of Stiegler's political project- the premise that thinking technics and time from a perspective of originary technicity will permit more important and dynamic thinking of our modern circumstances in which the borders between humans, technology, and nature are felt as blurred and in which technological innovation disrupts the capacity of our social and political institutions and outpaces culture.

How technics disrupt and morph our experience of time and space, and thus our social cohesion and our very being is the core objective of Stiegler's work. Global ecological concerns and technological issues become one and the same question which we can examine via an exploration of displacement and deterritorialization which takes place continually at a result of accelerating technological innovation. Stiegler's self-proclaimed task is to examine the relationship

[35] Ibid, p. 11.
[36] Ibid, p. 12.
[37] Ibid, p. 13.

of foresight and hope to distraction and fear via a rereading of the myth of Prometheus which emphasizes the role of his forgetful brother, Epimetheus. Stiegler establishes his originary technicity hypothesis through his focus on Heidegger's later understanding of technics and time. This becomes the foundation for a way to think how humans exteriorize memory via technics and thus achieve psychic and collective individuation in a way that pushes beyond the analytical limits of existentialism and phenomenology. How far Stiegler's project is able to push beyond phenomenology and create something truly original remains to be seen, however his premise is an essential development in the way we speak about technology within philosophy.

Current Critiques of Abram and Stiegler

In order to be able to understand the potential compatability of the author's works, it is important to understand the limits of their work. Both suffer criticisms for the way they approach perception and reflection, however, ultimately, they overcome this to offer an affirmation of our present circumstance based in an attempt to overcome a Derridean 'aporia of the origin'. The largest critique of Abram's work comes from Ted Toadvine, a scholar of Maurice Merleau-Ponty and leading voice in the ecophenomenology movement. Despite supporting the overall intentions of Abram's work, Abram is suspiciously absent from Toadvine and Brown's *Ecophenomenology: Back to the Earth Itself*, a central ecophenomenology text from 2003.[38] Toadvine later argues in a 2005 article that Abram misunderstands Merleau-Ponty's position on the sign-symbol and mind-body dialectics and relies heavily on a 'fall from grace' motif.[39] This is a critique that finds echoes across ecotherapy scholarship. According to Toadvine, Abram has not thought beyond a mind-body dualism, he has merely inverted the hierarchy. Abram has responded to Toadvine's critique, claiming that although Toadvine has the best intentions and is a deep scholar of Merleau-Ponty, his claim that Abram 'castigates' verbal reflection misses the point and perhaps reflects a larger myopia in academic philosophy. Abram claims that his work, in being a hefty work of critical

[38] Brown, Charles S., and Ted Toadvine, eds. *Eco-Phenomenology: Back to the Earth Itself*. N edition. Albany, NY: State University of New York Press, 2003.
[39] Toadvine, Ted. "Limits of the Flesh: The Role of Reflection in David Abram's Ecophenomenology." *Environmental Ethics* 27, no. 2 (2005): 155–170.

reflection in and of itself, directly embraces reflection in both oral and literate cultures, and is only "critical of a particular kind of verbal reflection — that which forgets its own genesis in the interplay and tension between our animal body and the animate earth, a reflection that denies its own rootedness in the bodily field of experience."[40]

The most comprehensive critique of Stiegler's work is from 2013. *Stiegler and Technics: Critical Connections* separates Stiegler's work into five strands: anthropology, aesthetics, psychoanalysis, politics, and pharmacology.[41] His philosophical anthropology begins with a rethinking of the origin of man through the idea of technogenesis and epiphylogenesis. In this volume, Richard Beardsworth argues that Stiegler glosses over what is necessary to put industrial capitalism in its place; that "Stiegler offers us at the same time a groundbreaking philosophy of technology and a frozen notion of political possibility."[42] According to Beardsworth, Stiegler's work has made important impact on critical theory by opening up a new genealogy of technical supports which "sidesteps the totalizing Heideggerian gesture around technology [and] ultimately places Stiegler's work outside the terms of deconstruction."[43] Beardsworth explains that by critiquing Husserl, Stiegler gives us new structure for 'tertiary memory' that "inscribes modern phenomenology in a materialist history which, at one and the same time, undoes the quasi-formalism of the Derridean 'trace' and [....] proposes a re-writing of Marxist themes compatible with cognitive capitalism."[44] Lastly, Beardsworth praises Stiegler for going against a postmodernist tendency to reject post-Enlightenment reason and institutions, instead making the case for a "rationally substantive political invention."[45]

Fellow ecophenomenologists Ted Toadvine (2005) has accused Abram of romanticizing or even orientalizing oral cultures and has criticized his work for "its idealization of the body or 'Flesh' as an agent of political change."[46] While these critiques rightfully challenge some of the finer details of Abram's work on language and the technology writing, they do not take away from

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[40]David Abram, "Between the Body and the Breathing Earth: A Reply to Ted Toadvine." *Environmental Ethics* 27, no. 2 (2005): 171–90.
[41] Howells, Christina, and Gerald Moore (eds.). *Stiegler and Technics*. Edinburgh: Edinburgh University Press, 2013.
[42] Beardsworth, Richard, "Technology and Politics: A Response to Bernard Stiegler" in *Stiegler and Technics*, edited by Christina Howells and Gerald Moore, (Edinburgh: Edinburgh University Press, 2013), p. 208.
[43] Ibid, p. 210.
[44] Ibid, p. 211.
[45] Ibidem.
[46] *The Oxford Handbook of Ecocriticism*, ed. by Greg Garrard, p. 14.

the overall impact of the work. Despite any criticisms, Abram's genealogy of technics set within a narrative of our ecological relationships opens a necessary door for ecophenomenology, and thus for environmental ethics and aesthetics general, to embraces technics. The political possibility of Abram's work might not be understood via his use of Merleau-Ponty's concept of the 'Flesh', but by the way his work opens new opportunities for dialogue with philosophy of technology which, taken in tandem with Stiegler's politics, could engender new thinking about the impact of technologies of disorientation on our ecological relationships. If Stiegler is correct in his claim that technics are largely unthought-of in philosophy, then Abram's writings, even with their limitations, are fertile soil for scholarship at the intersection of philosophy of technology and environmental philosophy through a shared methodology in phenomenology and critique of technics.

That technological competence can result from an understanding of the genealogies of technologies at hand- be they technologies of writing or information communication technologies, is communicated by their methods despite differences in temperament and genre. Stiegler's concern for repairing our relationship to the world, just like Abram's, focuses on perceptual and psychological enchantment through a larger awareness of the role technics play in forming our consciousness, yet he necessarily writes for a different audience. Aside from obvious language differences, the settings in which they chose to stage their narratives about technological encounter are the primary way in which their work is distinguishable into the distinct categories of environmental philosophy or philosophy of technology. The aesthetic differences in their writing seem to dominate how their work is positioned within the academic literature and is thus adapted or adopted into environmental or technological practices. Looking deeper and the structure of their arguments, not just the aesthetics of their writing, shows that the disciplinary divisions are secondary to what they share in common in terms of method and underlying conceptual frameworks. Both their work frame social issues within a larger narrative of technics which can contribute to conversations about the nature of perception and reflection in a narrative that simultaneously affirms the written word and symbolic interaction with the world while advocating for sensuous, embodied encounters with a "more-than-human" world which integrates technology.

Conceptual Compatibility

Now that we have explored how both philosophers construct their foundational arguments and some basic criticisms, it is important to ask in what ways are their works similar and different and what might all this mean for an attempted synthesis of their ideas. In general, both Abram and Stiegler frame a similar problem with similar dynamics even while writing from different points of view and focusing on different contexts and situations in which the relationship between technics and spirit plays out. Firstly, at a foundational level, each work begins with a premise of crisis and disenchantment and a critique of technics and of philosophy that aims at revealing a possibility for perceptual and symbolic engagement with the world that is reciprocal and participatory. This possibility for spirited or enchanted engagement is precluded by overwhelming technological innovation and attentional disorientation which we can overcome through an expanded understanding of ourselves as always ecological and technological. Both authors lay out this expanded understanding primarily via the method of a philosophical genealogy.

Both authors conceive of technics pharmacologically, as simultaneously an obstacle and pathway to existential possibility in our relationship to time and consciousness. They both revive and extend critiques present in Plato's *Phaedrus* dialogue in order to problematize the way technics simultaneously constitute, engender, and debilitate our memories. External prosthetic memory aids permit the engagement with pasts that were not one's own and thus open up the possibility for increased conflation of historicity and facticity. For Abram, the primary ill of this process is that it withdraws us from the logic and meaning inherent in sensual bodily encounters with the present moment in its infinite animate forms and beings. For Stiegler the issue is the same, though in his early works scarcely mentions beautiful phenomenon like bird song or the delicate rhythms of speech. He instead focuses more broadly on macro-social level ramifications, for instance, how our perceptual attention and libidinal drives get systematically exploited for profit by media industries, thus preventing our ability to instantiate ourselves as individuals.

This process of industrial populism, according to Stiegler, prevents humans from distinguishing themselves from the collective identity and pursuing activities of authentic expression of the self (in a literal sense here). This grammatization of our speech habits, bodily gestures, social relationships, and general behaviors leaves us with disoriented, desensitized, and programmed spirits. His solution to this disindividuation is to directly acknowledge these

pharmacological dynamics and to explore the individuation process in the environments and technologies that help and hinder us. Through an exploration of a larger ontological individuation and relation of all beings, we may discover our capacity for individuation through new technologies and circumstances. Both authors agree that we are thoroughly "enchantable" and "disenchantable" beings who need to individuate and participate with other individuated beings in order to feel wonder. Though they focus on different contexts in which this might play out and on different instances of those individuated beings with which we reciprocally participate, they roughly agree on the mechanisms or patterns at play.

Secondly, they both attempt to think individuation at multiple registers simultaneously and in this they both, in their own vernacular traditions, build upon the nondual thinking of relations present in the work of Heidegger, Merleau-Ponty, and Derrida. Abram does this by demonstrating analogy between Merleau-Ponty's thinking and the animism of indigenous and oral peoples and by linking human consciousness and technological evolution to ecological surrounds- to our bodily and sensual reciprocity with animals, atmosphere, and all things Other. Stiegler achieves a similar end within an aesthetic that is more intellectual and analytical, pulling on Derridian *différance* to express how humanity and culture are shaped by the processes of nature, attempting a grammatology. All in all, they offer us analogous concepts and strategies for shifting out of a general malaise which constitute a form of 'technics' in itself. The fact that their projects themselves can be understood as philosophical technics means they are subject to pharmacological and ecological dynamics, which has implications for a synthesis of their works.

Both authors use the premise of crisis and the motif of the suppression of questions in philosophy as means of giving import to their arguments and allowing for a basic structure through which they can express those arguments. For Abram and Stiegler both, our contemporary situation is full of interwoven crises which are ontological in origin and require the revelation of suppressed questions in philosophy to be solved. This is a way to constitute the role of philosophy in society and justify its existence. Both philosophies are grounded in an assessment of modern social ills based in creative readings of the history of technics which implore readers to engage in deep and experimental ontological questioning. Abram's work mostly focuses on the individual experiences of consciousness and prefers lyrical writing over overt political commentary while Stiegler's work is essentially a post-Marxist critique of capitalism based on his own synthesis of the ontological claims of Heidegger, Simondon's work on consciousness, and the anthropology of Leroi-Gourhan.

Their critical readings of technics are parallel assessments of the shift in the use of language from improvised, enchanted, reciprocal expressions of being with the physical world which takes place an ethereal and constantly renovated moment to an abstract and spatiotemporally disoriented experience marked by both by reduced and creativity and vitality and simultaneous new opportunities for creative expression. We see an example of this in Stiegler's critique of numeracy. He claims that the shift from geometry to numeracy in mathematical thinking resulted in a loss of imaginary capacity and remembering this rupture is a means of repairing our ties to the physical world which fuels thought. This is directly parallel to Abram's overall analysis of the extent to which our experience of the moment is dependent on orthography. For instance, Abram details how we have lost touch with the ecological origins of our orthography which has made the long voyage from external markings or animal tracks which constitute landscapes as original texts, to increasingly self-referential and isolating technology of phonetic alphabets which obscure their own origins. Abram's entire work remains focused on the technology of writing while Stiegler's attempts to discuss the totality of technology in grammatological terms.

The question of the relationship between literacy and thought is old as philosophy itself and is present in Abram's reading of the story of Phaedrus as well. Though Abram does not use the terms hypomnesiac and amamnesic, they reach essentially the same conclusions as result of their readings. Simply put, our increased ability for abstract thinking is enabled by the technologies we invent, however what we gain in conceptual agility we lose in capacity for memory and for connection to the phenomena we perceive. Abram explores this tension as the root cause of our disenchantment; technology has drawn us away from our bodily intuition and thus eclipses an originary reciprocity with our ecological contexts. Abram never engages Derrida's work for extended periods of time, and when he does, he is very critical and fundamentally misunderstands Derrida's position as ignoring the ecological origins of writing. Abram notes that Derrida's notion of trace might not work if we consider the origins as non-human, but this simply misreads Derrida's understanding of the challenge of seeking origins. Abram is a closer ally to Derrida than he might have portrayed himself to be.

Abram and Stigler both come to similar conclusions about the relation of technics to human consciousness and, according to Stiegler's definition of the term, Abram's rendering of technology also amounts to an organology, though Abram does not use that term. Though they both essentially construct an organological understanding of technics, Abram uses this organology to different ends

than Stiegler. He uses this framework to advocate for a return to the vitality, spontaneity, and offered by the pre-literate expressions of language. Another major parallel in their works is the claim that reciprocal participation with the world is occluded by technological disorientation. Both authors agree that our psychic disenchantment comes from a lack of cultural and conceptual equipment to participate in our environments reciprocally and our forgetting of our technological origins is culprit. Rapid change in technological innovation has left us living in a physical world to which our cultures have yet to adapt. In David Abram's thinking, as literate peoples, we are caught in a tailspin of intellectualism, abstraction, and reflection which eclipse truer, sensuous encounters with the living, breathing world all around us. If we can learn to turn down the volume on our anthropocentrism and abandon an addiction to reflection in favor of perception, we will readily understand that we are not standing on the earth, nor do we live in environments, rather we are expressions of the animate earth and co-create our environments in every encounter.

While Abram's critique focuses largely on the body as a locus of meaning and encourages sensuous bodily perception as a way to combat the pitfalls of technological life, Stiegler understands our physiology, and thus our consciousness, as technological in origin, thus opening up new possibilities for thinking an individual politics of technology which avoids a myth of pure origins. For instance, Abram's use of Merleau-Ponty's concepts of "flesh" and "chiasm" are analogous to the 'organology' Stiegler employs to understand the co-evolutionary relationship between human bodies and technology. Stiegler brings this organology into the present moment arguing that our very consciousness, which is organologically related to technology, is coopted by the dynamics industrial populism. Our ability to constitute ourselves as individuals is arrested at the same time our attention and desires are exploited for profit in an economy based on cognitive capitalism. However, despite this politicized reading, Stiegler does not allow for a 'pure' origin that is not fundamentally technological. He more thoroughly deconstructs this hierarchy, while Abram mostly inverts it. The implications of deconstructing a myth of 'a-technological' origins may be an extremely useful contribution to environmental thought in the 21st century, contributing to Abram's goal of overcoming nature-culture binaries while at the same time challenging the episteme-techne divide which has plagues Western philosophy since Plato. Abram's concept of reciprocity is analogous to Stiegler's notion of participation, and it seems that the prescription for direct, sensuous, reciprocal encounters with nature alleviates the stress that comes from the liquidation of our shared symbolic forms. Despite criticisms, both thinkers implicitly and expressly

challenge much of post-structuralist thought in an important way, engaging many of its central concerns; the hierarchical conceptualization of speech and writing, and orality and literacy, time and space, and the relationship of language to perception. Abram's approach to language and ecology can be read as partially- if not predominantly- a phenomenological approach to technology embedded within an environmentalist or ecophilosophical aesthetic. Vice versa, Stiegler's return to Heidegger represents an attempt to overcome the limits of his post-structuralist inheritance which, to Stiegler, had proved inadequate for conceptualizing technology. In this, both of their responses to post-structuralist thought can be understood vernacular iterations or extensions of a non-dual approach to philosophy of technology which extend Heidegger, Merleau-Ponty, and Derrida's attempts at thinking relation in the 20th century.

Post-structuralist philosophy had been in constant engagement with the phenomenological tradition and drew in implicit and explicit ways from nondual philosophies from Eastern traditions. This is most evident in the work of Heidegger, but scholarship on deconstruction and non-duality shows that the work of Derrida, Merleau-Ponty, and their contemporaries can be articulated as nondual philosophy.[47] Abram uses Merleau-Ponty's bodily phenomenology to challenge the work of Derrida, who was a direct mentor to Stiegler. Well-known as a thorough reader of his contemporaries, Derrida wrote surprisingly little about Merleau-Ponty's work. Understanding why he chose to engage or to not engage Merleau-Ponty's phenomenology of the body and philosophy of language could offer some further clues and context for Abram's specific critiques of Derrida's work and allow for scholarship on Stiegler's extension and reworking of Derrida's ideas about writing and memory. Abram's critiques of Derrida are brief and lie primarily in footnotes. Given how little Abram directly addresses Derrida's work, it seems reasonable to assume that his criticisms are mostly function as provocations and challenges to dominant trends in the philosophy at the time which were not yet directly engaging ecological themes. This complex web of relationships between philosophers and the work of their contemporaries requires deep scholarship in its own right. Furthermore, the relationships in philosophy evoke the nonlinear dynamics of ecological systems which an ecophenomenologcal approach to philosophy itself might address.

Taking a look at how they represent vernacular or idiomatic examples of nondual philosophy helps us theorize what the potential limits and possibilities of their works might be

[47] For examples of this type of scholarship, see the work of David Loy (1996 & 1997)

beyond their original contexts. As critical responses to post-structuralist philosophy, Abram and Stiegler's projects focus on the non-dual relationship between humans, environment, and technology. The fact that their thinking is so productive and well-received shows that there are multiple pathways to approaching the same subject matter. Furthermore, the overwhelming commonalities in their arguments is reason for philosophers to overtly acknowledge commonalities and shared motivations with the work of others.

Demonstrating the differences between the work of two philosophers is a necessary aspect of identifying unique contributions to philosophy. However, respecting individuation, we still must not over-emphasize the uniqueness of individual philosophers in a way that denies the essential collaboration that underlies and strengthens philosophy overall. This tension between individuation and collaboration is certainly inside Abram and Stiegler's thinking. At the core of how they understand the dynamics between humans, environment, and technology is co-individuation. Bringing together their concepts means that proper psychological individuation requires deep sensuous, reciprocal encounters with the more-than-human world and that we can engender this participation by recognizing the dynamics of modern technology as fundamentally pharmacological in nature. Respecting these concerns, the concepts within their works becomes an important framework with which to explore co-individuation in the phenomenon of philosophy itself.

Chapter Three:

Abram and Stiegler's Pharmacy

Having diagnosed social and psychological disease as fundamentally perceptual and technological in nature, Abram and Stiegler's critical readings of technics both amount to ecological, organological, and pharmacological approaches to the question of technology. Ultimately, though each uses his basic framework to advocate for slightly different responses to the challenges of technology, the multiple structural, conceptual, and rhetorical parallels reveal a foundational, underlying method, a 'technics of repair' common to both their reenchantment philosophies. We can combine their essential medicine into a complex brew which helps us dissolve the conditions of our malaise and direct us back towards reciprocal, spirited participation with the world. The essential ideas put forth are two-fold. The first argument is that technical competence or knowing regarding our contemporary technologies is made possible in part by originary thinking (that is, *techne* and *episteme* are inherently codependent). The second idea is that a pharmacological and ecological understanding of philosophy itself calls for epistemic humility and a relinquishing of the tendency for control and calculation in philosophy (a techno-ecophenomenology necessarily proceeds by deconstruction). These two notions taken together offer basic ways for 21st century philosophers to think with and against Abram and Stiegler.

Demonstrating how their approaches to environment and technology can be understood as vernacular iterations of nondual philosophies of reenchantment based in a reading of technics permits the construction of a philosophical approach to environment and technology which both understands the body to be the primary locus of perception at the same time that it is necessarily technological. Post-structuralist thinking of non-dual relations which Abram and Stiegler offer us in their own idioms helps us think ourselves out of epistemological hubris and overcome our own desire to know what is yet to come before it comes. In Heideggerian terms, it helps us put to rest our long-running and historically-ingrained desire to calculate and control. To predict the future can be understood as an attempt to gain control over the non-existent. In this logic, the notion itself is absurd and the spirit is liberated from the weight of existing in a state of perpetual failing to predict the unpredictable.

That they constitute vernacular or idiomatic presentations of non-dual ontology allows us to put aside any of the flaws or limitations to their individual arguments and focus on new possibilities that can arise through brining their philosophies into encounter. The fact that two works from different disciplinary backgrounds yet are so deeply compatible is reason enough to forgive minor flaws or rhetorical limitations. Simply put, while not perfect, their projects are certainly "compatible enough" to move towards one another. It opens the possibility for an approach to reenchantment that understands philosophy itself as a phenomenon we engage which also has pharmacological and ecological dynamics.

Lastly, an important way to make use of this encounter as a 'technics of repair' is to use Abram and Stiegler to help overcome a type of apocalyptic or eschatological tendency in environment and technology narratives. By casting the origin of our current techno-eco-social disorientation into the mysterious domain of aporia, a hybrid of their work enables us to acknowledge how little we can know about the *where* from which our present moment emerges and thus how little we can predict the *where* that we will be in a future present. How we can deploy this radical epistemic humility to alleviate a tendency to think about ubiquitous technology and precarious climate change apocalyptically is as difficult an endeavor as we wish to make it. In philosophical writing, this might mean tracing the origins of the relationship between the fear, faith. And the unknowable.

Proving that this synthesis of their work is a worthy endeavor required a clear understanding of the constraints and affordances of the works at hand in order to avoid isolated discourse or idle speculation about metaphysics. We can now move ahead assured that we are making philosophy is internally coherent and rigorous while being relevant and impacting beyond itself. Applying their concepts to the object of philosophy itself allow us to orient ourselves in relation to philosophy and construct a basic synthesis of their concepts.

Technical Competence via Originary Thinking

The first argument is that knowing how to use modern technologies in an ethical way now takes precedence over knowing how they work, especially given the fast pace of innovation, the fact that modern technology is designed to be extremely intuitive, and the impending Artificial Intelligence revolution. Much of contemporary philosophy of technology (see Borgman, Dreyfus, Feenberg and Higgs) draws from Heidegger to create ethical approaches to philosophy and there is a strong tendency to argue that meaningful engagement with technology is derived from learning their inner mechanics through direct manipulation. There is no doubt to this, however achieving technical competence with the ever-expanding number of technologies which abound is practically impossible. Any attempt to do so would amount to shifting from a state of passive disorientation at the hand of industrial populism to an active sense of overwhelming impotence. Thus, a contemporary technological competence means knowing what to technologies for when we encounter them. In this sense, thinking technological origins permits technical know-how which is a sort of *techne by way of episteme*.

The repair technics, which amount to a strategy guide for reenchantment, has at its core the project of the deconstruction of the self. The purpose of this deconstruction is to individuate from the collective in order to shift beyond what Heidegger saw as our broken and inauthentic approach to being. it might be understood as a means of approaching the Buddhist concept *of* anatta, or "non-self", in the language of post-structuralist philosophy. We know generally from Eastern thought and from thinkers like Heidegger, Merleau-Ponty, and Derrida, that suffering is largely a case of mistaken identity. Oftentimes we are unable to see past the illusion of separation between all things. As a result, we experience the beings we encounter as Other and miss half the equation. We fail to see the extent to which we are shaped by the phenomena we perceive, forgetting the bi-directionality of the exchange. The self needs to be deconstructed in so far as it is posited in a hierarchical relationship to that which it encounters. A certain yielding needs to be substituted for an ethos of calculation and control.

In the context of Abram and Stiegler's work, arriving at this position requires a trip to the origin of our relationship to technology and to ecology. We can never reach this origin, but the act of remembering is essential to understanding how to engage the technologies in a way that serves

creative self-expression, individuation and connection. This permits us to combat a general disenchantment via disengagement.

Abram and Stiegler's complimentary philosophies amount to a history of technologies of participation with our environments in their natural, spatial, temporal, and social expressions. Abram showed us how the evolution of the technology of the written word changed our relationship to our own embodiment and to the reciprocal exchange with the ecological environments which constitute our very consciousness. Invoking the story of Phaedrus, Abram and Stiegler make the age-old claim that we pay the price for technologies of exosomatic memory with a specific type of forgetting. This tension between the polarities of remembering and forgetting was an issue at the advent of literacy which also coincided and coevolved with philosophy. Stiegler's assessment that technics have always formed the constitution of our consciousness applies to technics in general and most centrally to philosophy, to technics of writing which permit disembodied, displaced, and temporally complex thinking. This compromise with our adopted technical prosthetics is at the center of a pharmacological dynamic of attraction and resistance, oppression and liberation.

To combat this forgetting and to redeem some of what we may lose through technics, Abram and Stiegler offer us a strategy: a genealogy of our technological circumstance which is in essence a critique of origins and an act of remembering. We can trace the origins of technologies via the technologies themselves, and, in acknowledging their changing nature, construct a historical philosophical narrative as an elaborate and highly technical act of remembrance. This act of remembrance offers us coherence across time and allows us to commune with and develop kinship with the past while recognizing that we are inseparable from the technologies and ecologies which shape our consciousness. This past with which we seek communion is accessible in the present moment through the direct experience of technics and environments themselves which occurs concurrently with our encounter with concepts. In this sense, we could make an argument that a property of technics is that they afford their own self-remembering, just as a property of ecologies is that they afford a reading into their pasts. Whether or not we can trace those pasts with a purely perceptual engagement- without the aids of language or concepts- is a topic to be explored below, however, we know that at minimum we can trace the histories of our conceptual and linguistic understanding of phenomena.

In written language, we have preserved linguistic and conceptual phenomena which are themselves records of moments or events. The nature of those moments or events are unknowable in totality, but we are able to experience the records of experiences. This recursively becomes a sort of knowledge by proxy, a "knowing about" something as opposed to a direct "knowing" of a phenomenon in the present. In this sense, their works show how historical thinking about technologies supports both our epistemological *and* technical competence regarding those technologies. This critiquing the origins of a technology a necessary, though unsuspected, element which supports our technical competence. Historical accounts of relations become a counter-measure to disorientation: a sort of *techne by way of episteme*. Overcoming the ancient divide between episteme and techne is the first step in administering this basic philosophical medicine. To do so, we need to conceive of the history of our consciousness as originarily technical in Stiegler's sense, at the same time that it is originarily ecological, as shown by Abram's look at the ecological origins of language.

To encapsulate both technical and ecological origins, we might offer modifications to Merleau-Ponty's 'flesh' and 'chiasm' which simultaneously evoke the body, the environment, and technics. To Abram and Stiegler's projects we might add notions of 'originary reciprocity' and 'knowledge as skill' which can work for both technological and ecological discourse by challenging the episteme-techne divide. This helps us to use their arguments to understand philosophy itself as a technic which can be assessed in pharmacological and ecological terms.

Epistemic Humility and Theory and Practice

This opens the doors to the second argument, which asks: How does understanding Philosophy as a phenomenon we encounter which conforms to ecological dynamics expand our definition of self and lead to compassionate philosophy? Reenchantment requires not just reciprocity and participation with nature and technology, but with philosophy and its methods. The aesthetics of the writing of philosophy are crucial for achieving its proposed goals. In this way, Abram's project achieves its goal both with the structure of its narrative and its use of lyrical and sensuous language. Stiegler's narrative is as fascinating as it is long and complicated. In a sense this both speaks to

and spites the objective of his project to reduce the disorientation that results from innovative technics.

Notably, the analysis from chapter one suggests that their projects resist application beyond their local contexts. This can be an underlying strength to their projects, however, insofar as they fail to acknowledge the local character to their works, instead operating under presumptions of universality and, in Stiegler's case, a tendency towards prophecy, their projects are limited. Laying out a synthesis of their ideas which is overtly local in character and which acknowledges epistemologically humility would do justice to the pharmacological and ecological natures of philosophy and would render their projects more powerful and graceful.

What might we do with the 'facticity' of our encounter with Abram and Stiegler's writing? What possibilities are opened up by understanding their writing as naturally in the past and our encounter of it as necessarily in the present? An ecopharmacological approach to their works means a combination of what Abbinett (2018) terms Stiegler's "Technological Dasein", with embodied perceptional and reciprocal encounter with their works.

Epistemic humility in philosophy, when approached pharmacologically, means in part maintaining the question of dosage as a priority question in any endeavor. Not necessarily a call for moderation in the sense of equal balance, but a call for moderation in the sense of keeping an eye on dosage. Understanding philosophy as a contextual anthropotechnics which functions both as therapy and as a strategy by which we prepare for the unknown divests it of its sacred role and puts it to use as a tool which we use in specific scenarios to address the fact that unknowability is coming. Philosophy, in this way, becomes a technic which promotes conceptual adaptability and flexibility in its users, the conceptual counterpart to physical therapy and mobility practices, which allow us to address previous traumas, weak-points, and rigid habits of thought to work towards a goal of preparedness for inevitable improvisation. This pragmatic approach to philosophy can cultivate epistemic humility through an acknowledgment of its technical utility. An approach to philosophy as technics does not necessarily need to decide on what is a proper pursuit of truth or whether or not philosophy conveys those truths. So long as it is approached as a technic which is ecological and pharmacological, it can to orient users towards the world while embracing that it is an immanent phenomena of that world and not a theoretical or hypothetical thing apart. Its capacity to orient those who practice it, then, comes not from absolute truth claims, but instead from its ability to increase competence through adaptable methods which prepare us for improvisation in

the ever-becoming world from which those methods also comes. This approach understands every phenomenon involved in co-constitutive and simultaneous non-linear dynamic.

One way by which this philosophical approach might proceed is in a similar manner to which new movements are learned in contemporary music, dance, or natural movement seminars: by isolation and grammaticization of a pattern, integration into a larger sequence or syntax, and then exploration and refinement within a context of improvised free expression (poeitic environment). The relationship between each of the three phases is something roughly parallel to the relationship between the basic educational arts of grammar, dialectic, and rhetoric. A conceptual fact is introduced and accepted, then it is analysed and deconstructed to understand its robustness and its relationship to a larger conceptual ecosystem. Lastly, the knoweldge or competency gained by the first two activities is explored and communicated.

There seems to be great carry over in the application of pedagocial methods between creative fields. Teaching methods from one art discipline can be identified, understood in terms of where it might fit into a larger curriculum, and then deployed in a real-life scenario and refined. Education, in this regard, is understood as simply another domain, practice, craft, or art which 1) proceedes via a series of identifiable assumptions and 2) has success and failure criteria which can be evaluated in terms of affective engagement (the duration, intensity, tone and rhtyhm of the emotional vitality of parties during any given activity) and benefit from direct and shared acknowledgement of those assumptions, procedures, and criteria by all parties involved. Rather than destorying any of the mystery or magic of arts education, an understanding of pedagocial technics by all parties involved deconstructs the student-teacher heirarchy whilst allowing both parties to succeed in those resepctive roles through clearer understanding of the reciprocal dynamics of the encounter.

21st Century Metaphors for Philosophers

In *What is Philosophy?* (1996), Gilles Deleuze brilliantly distinguishes wisdom from philosophy and proclaimed that the purpose of a philosopher is to build concepts. Nowadays there is talk of philosophers as concept engineers[48] who ought to work in technological research and

[48] See Luciano Floridi, *The Philosophy of Information* (OUP Oxford, 2013), and Herman Cappelen, *Fixing Language: An Essay on Conceptual Engineering* (Oxford University Press, 2018).

development.[49] These metaphors clearly reflect an appeal to the technological and to the calculable. One wonders how Heidegger might feel about his intellectual descendants. Our authors hint at slightly different roles at the borders of these trends. Stiegler's "realignment of techno-human relations put writing at the epicenter of contemporary and projected cultural and ontological transformations."[50] His philosophical project offers the sense of philosopher as one who cares through writing. Though stylistically different, Abram might very well agree. Far from a concept engineer, he operates more as a lyricist and tour guide, directing our attention by simply walking the trails he wants us to and pointing. And so, these two philosophers offer similar projects with different skins. Recognizing that it is mostly superficial tone and language which keeps them apart in the literature, this thesis sees an attempt at a critical and synthesis of their projects as a way to both overcome the limitations of their individual works while making the case for philosophy that more explicitly incorporates ecological, technological, and psychological inquiry in both content, structure, and methodology.

Each discipline offers unique perspectives and tools to address human wellbeing. Exploring Abram's approach to phenomenological thinking, which embraces ecological, psychological, and technological themes alongside Stiegler's understanding of how technology alienates and disorients at the same time that it liberates and permits self-expression, dissolves boundaries where they do not need to be. A synthesis of their works permits intellectual thinkers to overcome conceptual blocks towards technology in relation to ecology, psychology, and artistic expression and perhaps alleviate psychological or emotional resistances to their environments. Understanding philosophy to be a large organism or ecosystem allows us to see the resistances between individual philosophies as part of a larger homeostatic dynamic. Respecting the distinction between philosophy and other wisdom traditions forms the core of a pharmacological understanding of philosophy.

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[49] Don Ihde, *Experimental Phenomenology: An Introduction* (Albany: State University of New York Press, 1986).

[50] Tinnell, John. "Grammatization: Bernard Stiegler's Theory of Writing and Technology." *Computers and Composition* 37 (September 1, 2015): 132–46. https://doi.org/10.1016/j.compcom.2015.06.011.

Conclusion

Technology, Ecology, Philosophy: The Pathless Path

Across the globe, an increasing number of humans live urban, hyper technologized, highly-mediated lives shaped by the dynamics of consumer capitalism and what Stiegler terms ‘industrial populism’- a state in which media technologies synchronize the behavior and temporal perception of large populations in an unprecedented manner. If Stiegler is correct in his assessment that our ability to individuate is stunted by a ‘cognitive capitalism’ which constantly solicits and arrests our attention to make profit, then we need conceptual tools and strategies to combat this if we wish to create meaningful and expressive lives.

Creating these new tools, paradigms, and strategies requires a rethinking of the ecological, organological and pharmacological nature of technics and of philosophy itself. Abram’s ecophenomenology offers us a method to investigate and make meaning from the "more-than-human world" beginning always with the body. At the same time Stiegler offers that we can find the solution to our problems in the very same technologies that oppress us. Critically engaging each approach in terms of the other can take us to new places and help us outgrow our current problems. One sword sharpens the other.

By creating an ecophenomenology that embraces technics, Abram delivered environmental thinkers better conceptual resources with which to build environmental ethics and aesthetics. Thanks in part to Abram’s work, at the current moment, environmental thinkers in the North American tradition have more methodological tools with which to construct new narratives that address the psychological and perceptual aspects of climate destruction in a holistic manner without relying on myths of pristine, non-human nature.

If the knowledge produced by the methods of ecophenomenology gains legitimacy in the eyes of people who spend most of their lives in cities (including politicians, media-makers), then there are longer-term implications of ecophenomenology for American culture and American environmental policy. By ensuring that this new thinking can stand up to the enormous narrative importance of technology in modern lifeworlds, a phenomenology which can incorporate technics with ecological themes will be an increasingly important philosophical tool for interpreting and reflecting on deep ecological, technical, and social issues.

As we can see from a close reading and critical analysis of Abram and Stiegler's works, despite aesthetic differences and large, universalizing claims present in their arguments, they have a high level of compatibility which speaks to the potential of philosophy to bring together environmental, technological, and psychological thinking. Their projects demonstrate structural and conceptual parallels in their assessment of what caused our modern malaise while offering slightly divergent, yet complimentary suggestions of how we should work to overcome that state and achieve meaningful lives. Abram's emphasis on the body and reciprocity with our environment provides a thinking of the sensual and physical that can add richness to Stiegler's more cerebral and macro-reductive approach to organology and technological prosthesis.

Despite these basic commonalities, Abram's work has been largely engaged by environmental philosophers while Stiegler has not, and *vice versa* Stiegler's concerns are largely engaged by those who work on techno-social problems which tend to be urban and industrial in focus and which give limited narrative or conceptual space to nature or wilderness. This lack of dialogue begs the questions: to what extent are their critiques of technics synthesizable and to what extent are they useful or limited beyond their local social contexts?

Because there is no known work which attempts to put their philosophies in dialogue, bringing their different approaches together can remove unnecessary disciplinary boundaries between the work of environmentalists, artists, philosophers, and technologists and to show how these seemingly disparate endeavors can work together. Blurring the aesthetic and methodological barriers between disciplines is a crucial step in building a phenomenological account of the development of civilization which embraces an aesthetic and technological reciprocity with nature and which can speak meaningfully about technics as an ecological phenomenon itself.

This encounter between continental philosophy and American environmental concerns provides useful strategies for thinking of the relations between nature, technology and psychology through the lens of co-individuation. The comparison shows that French and American thinking about technics is fundamentally compatible given parallel concerns for these themes and overlapping philosophical histories. These open gates invite transformation and cross fertilization within philosophy and encourages philosophers to see their own work as undergoing a continual process of co-individuation new communication technologies, local natural environments, and philosophical traditions.

The key offering brought forth from the encounter between their work is a radical epistemic humility that begins with an understanding of the limits of originary thinking. Part of this process is direct acknowledgement of reciprocal co-individuation as a property of any encounter between beings (human, technological, ecological). Additionally, crucial takeaway is that we can cultivate pharmacological understanding of philosophy itself as a communication technic with the capacity to connect/edify, to divide/alienate, and to be a scapegoat for others. This last step is crucial to cultivating a lightness and freeness of thought that inoculates us against our own ideological tendencies.

In regard to the academy, the above offerings broadcast a demand for more encounters between environmental texts in French and English, not to mention other languages and cultural traditions. This more translations and yet-thought of institutions which can encourage cultural exchange using modern technology. For instance, both Abram and Stiegler can be understood as contributing to a rich history of French environmental thought regarding the relationship of spirit, liberty, and societies of technology and control. These themes have been put forth in the 20th century by such thinkers as Jacques Elull and Bernard Charbonneau. Thinkers like Charbonneau have seen recent increase in translations into English, however he remains little known in the Anglophone world. Academics working between cultures are primed to advocate for more interwoven histories. It is important for environmental and technological writing to be exchange in a way which accords to the concerns philosophies themselves.

Tasked with addressing technology at the level of the individual, psychological, and perceptual, Abram and Stiegler each trace similar phenomena while presenting distinct solutions to the problems they outline depending on context and setting. Challenging the local contexts of their works will allow environmental philosophers who wish to better engage notions of the body in relationship to technology and nature to benefit from Stiegler's framing of the problem of industrial populism. It can also help educators of all stripes who wish to build 21st century pedagogies to empower their students to navigate unforeseeable political, environmental, and perceptual realities. Additionally, Stiegler’s work on the industrialization of time and the symbolic can help progress debates within ecophenomenology about the political nature of the perceptual and may help articulate pathways to a “Flesh” with increased political agency. Understanding how to politicize the perceptual or the aesthetic can help therapists, artists, technologists, educators, to

make work that addresses environmental degradation and ubiquitous technology at the level of the individual or perceptual.

In a similar vein, Stiegler's thought can contribute to environmental philosophy at large and scholars have the opportunity to explore how far his political philosophy might work beyond modern-day France and the EU. Given that French thought has informed the American experience of environment and government since the birth of the US as a nation, the compatibility is clear. Engaging the works of a broader cadre of French environmental philosophers, a category to which Stiegler clearly belongs, would equip contemporary environmental philosophers in the US with sophisticated conceptual. Stiegler's originary technicity, general organology can help conceptualize current technological and political themes in the US as they relate to national myths of origins. Stiegler's originary technicity thesis challenges the utility of Romantic concepts of wilderness and purity which have been essential to North American culture and which shapes environmental writing, philosophy, and conservation policy. Deep conceptual encounters between these philosophies can allow us to better assess current European and American responses to environmental confusion and technological innovation and offer nuance to those responses.

It might be said that nothing sells like a good crisis. There has been a soft-spoken background concern motivating this project, the idea that philosophy itself is a Faustian bargain. Abram and Stiegler's books have enormous ability to pull readers from the stagnant eddies and reconnect them with the world, but only if one can eventually put the books down. This thesis attempted to understand the pharmacologically correct dosages of contemplation and action and an immunological understanding of the relationship between mass-movements, concepts, and intellectual individuation. Abram and Stiegler convincingly diagnose the origins of these most popular globe-sized crises. This thesis sought to problematize the use of disenchantment and crisis as conceptual and rhetorical devices in philosophical writing. What is the relationship between these concepts and a tendency towards urgency and action in contemporary philosophy?

The result of this encounter, hopefully, is an evenness of heart: a willingness to embrace the gifts of modernist and post-modernist thought with gratitude while forging new paths with each successive individuation. 21st century philosophers who successfully slay their fathers and their father's fathers will be able to proceed with the tools of the Enlightenment in one hand, and those of post-modernity in the other. Abram and Stiegler have shown us that reenchantment means

continued participation with one's surround. Staying enchanted via philosophy means knowing when to draw one's sword, and when to return it to one's sheath.

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